

**REMARKS**

Review and reconsideration on the merits are requested.

**Claim Pending**

Claims 1-13 and 15-22.

**Amendments to the Claims**

Claims 1, 10, 11 and 19 are amended.

It is believed that the amendments to claims 1, 10, 11 and 19 regarding “consists of” are in accordance with the spirit of claim 2 as originally presented.

With respect to claim 19, the limitation is added of a supply reservoir containing powder which is at least partially a waste produce originated from method of coating by production and means for supplying the powder from the supply reservoir to the introduction means. See the paragraph bridging page 6/7 of the specificaiton

**DETAILED ACTION**

**Claims**

The claims are amended to further limit the same.

**Claim Objections**

The Examiner withdrawing the objection to claim 2 is appreciated.

**Claim Rejections - 35 U.S.C. § 112**

The Examiner withdrawing the rejection of claims 19-22 is appreciated.

**The Prior Art**

U.S. 5,834,066 Kunzli et al (Kunzli); U.S. 4,835,022 Huhne (Huhne); U.S. 6,503,575 Payne et al (Payne); Japan 05-339696 (JP ‘696); U.S. 6,017,591 Popoola et al (Popoola); U.S.

2004/0047992 Donelon (Donelon); U.S. 4,696,855 Pettit, Jr. et al (Pettit); U.S. 4,011,074 Powers et al (Powers); U.S. 5,445,514 Heitz (Heitz).

Art rejections are posed in Paragraph 6., 9., 10., 11., 12., and 13 and the Examiner provides a **Response to Arguments** in Paragraph 14.

As the Examiner will see, it is Applicants position that the subject matter of claim 19 is unobvious for the same reasons as claim 1. The same applies to all remaining claims in this application. Accordingly, Applicants focus on the rejection of Paragraph 10.

#### **Paragraph 10**

Claims 1, 2, 5, 6, 10-13 and 15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kunzli in view of Payne, JP '696 and **either** Popoola or Donelon.

The above rejection is respectfully traversed.

The Examiner's position is set forth in the Action in detail and will not be repeated here except as necessary to an understanding of Applicant's traversal which is now presented.

Kunzli fails to disclose the limitation of claim 1 that the powder consists of an alloy which is at least 50% by weight of zinc and a residual portion of the alloy is aluminium, wherein at least a portion of the powder is a waste powder product originating from a method of coating by projection.

Turning to Payne, Payne is a further example of prior art describing thermal spray processes for the deposition of coatings. Payne gives a general overview of known thermal spray processes, but Payne fails to disclose the use of Zn-Al alloy powder. Further, Payne is silent regarding the reuse of waste product powder originating from a method of coating by projection. Accordingly, Applicants respectfully submit that even if Kunzli is combined with Payne, and further

combined with JP '696 and either Popoola or Donelon, the combination does not suggest the present invention.

However, Applicants now turn to JP '696 Popoola and Donelon and review the same in more detail.

Payne contains the teaching that the Examiner urges. However, the Examiner is requested to note that Applicants have now used "consist of" language in claims 1 and 19.

JP '696 discloses thermal spray coating with zinc-aluminium powder, but does not disclose or suggest that at least a portion of the powder used for the coating could be a waste product powder originating from a method of coating by projection.

Popoola teaches the recycling of particles that were not incorporated into the coating of Popoola. However, Popoola does not disclose or suggest that the powder material used for coating consists of an alloy which is at least 50% by weight of zinc and a residual portion of the alloy is aluminium, as required by claim 1.

Donelon teaches, similarly to Popoola, the recycling of coated powder, but only for **ceramic** coating particles. See paragraphs 2, 3 and 30 of Donelon.

Applicants find it to be true that, as exemplified by JP '696, it was known to use zinc-aluminium powder in the context of spray coating methods, and, as exemplified by Popoola or Donelon, it was known to recycle over-spray.

However, Applicants respectfully submit that as of the effective date of the present application, one of ordinary skill in the art would have been convinced that recycling was impossible in the particular case where spray coating was with zinc-aluminium powder because of the substantial oxidation problems with this particular type of powder. The Inventors herein

surprisingly found that zinc-aluminium particles can be reused in flame spraying applications by simply introducing them at the right portion of the flame.

Applicants submit a DECLARATION in this regard. It is later discussed.

Withdrawal of the rejection of claim 1 and the claims which depend from claim 1 is requested for the reasons advanced above regarding claim 1.

With respect to claim 19, as earlier indicated, Applicants are of the view that claim 19 is unobvious for the same reasons as claim 1.

More precisely, amended claim 19 now further recites a supply reservoir containing a powder which is at least partially a waste product powder originating from method of coating by projection, wherein the powder consists of an alloy which is at least 50% by weight of zinc and a residual portion of the alloy which is aluminium.

With this amendment, Applicants respectfully submit that the zinc-aluminium waste product powder is an integral part of the claimed device, i.e., that said powder is now a structural limitation of claim 19, thus responding to the Examiner's position at the top of page 5 of the present Action.

### **The Declaration**

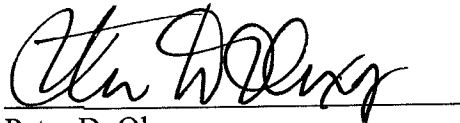
The Examiner is requested to note that co-inventors Tournier and Girardin are the authors of the DECLARATION.

Noting the exemplary qualifications of both individuals are set forth in the DECLARATION, and the work experience of the Declarants is indeed impressive, the Examiner's attention is directed to the discussion of **Invention** beginning at page 2 of the DECLARATION. While the remarks are rather straightforward, particularly compelling is the problems which the Inventors faced and solved as explained in d) of the DECLARATION.

Applicants respectfully submit that given the limits to the claims and considering the attached DECLARATION, they have overcome the case of obviousness which the Examiner urges has been presented, and request withdrawal of all claims and allowance.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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